SAVITRIBAI PHULE PUNE UNIVERSITY

SYLLABUS FOR

MASTER IN ARCHITECTURE
M.ARCH (ARCHITECTURAL CONSERVATION)

(To be implemented w.e.f. A.Y. 2015-16)

BOARD OF STUDIES IN ARCHITECTURE

FACULTY OF ENGINEERING

PREAMBLE

Cultural resources of India are vast and diverse. Built heritage is one of the important and huge component of the cultural resources and needs careful attention. Conservation practices which have evolved from monument conservation today focus on cultural landscape. It is a comprehensive term stretching the boundaries of conservation practices to include diverse fields.

Heritage conservation practices are multi disciplinary in nature and hence the training in conservation extends beyond the existing architectural curriculum in terms of the necessity of inclusion of interdisciplinary subjects from various fields. Nature of conservation projects varies in terms of scale and expertise and is becoming case specific. 'Changing mortar and brick is conservation' is a misleading perception of conservation practices and is building centric, in practice a conservation expert is expected to perform the role of leader, philosopher and manager.

The focus on living heritage brings many related fields into the realm of conservation practices. The curriculum should equip the conservation professional with technical as well as managerial skills. His role ranges from a conservation architect, conservation planner to heritage manager with sound philosophical base.

The proposed curriculum tries to address these demands of conservation practices to produce conservation experts capable of taking the emerging challenges in the field. It also tries to build the regional database of cultural resources through academic exercises.

The curriculum stresses the need of sound exposure to the students of the current conservation practices by engaging them in live projects to make them aware of nuances of conservation projects along with developing sound philosophical base.

The objectives of the course are,

1. Develop the skills of interpretation of heritage for the benefit of the society at large and sound philosophical base for conservation practices
2. Impart the required technical knowhow to the students pertaining to history, structures, planning as well as management streams.
3. Develop the ability to work as a leader in a multidisciplinary team by enhancing their soft skills.
4. To develop the regional database related to built heritage for the region of Maharashtra.

SEMESTERWISE LEARNING OUTCOME:

SEMESTER 1:
Student will get expertise in identifying heritage potential along with the basic knowledge of allied fields.
SEMESTER 2:
Semester II will widen the knowledge base to include urban studies for its complexities and resources.

SEMESTER 3:
This will prepare student to handle the challenges of heritage conservation at regional level and also make them aware of finer aspects of conservation practices..

SEMESTER 4:
This will develop student to apply knowledge and skills acquired during the course independently in formulating conservation proposal. .

25% of the total teaching hours are reserved for reflecting the institute's philosophy and its reflection in the design studio.

RULES OF COURSE STRUCTURE FOR
MASTER OF ARCHITECTURE,M.ARCH.(Architectural Conservation)

PROVISION OF INFRASTRUCTURE

Course shall be conducted as per the guide lines laid down by the Council of Architecture, New Delhi, with respect to intake of students, class rooms, studios, laboratories, seminar rooms, library facilities, students' amenities and all the appurtenant requirements to carry out teaching activity effectively.

APPOINTMENT OF TEACHING AND SUPPORTING STAFF

The appointment of teaching staff shall be made as per the norms laid down by C.O.A., New Delhi and other statutory bodies as applicable.

RULE NO. 1 : ELIGIBILITY CRITERIA

A student seeking admission to Master of Architecture Course must have secured minimum 50% marks in aggregate in a Bachelor of Architecture degree course or equivalent courses recognized by the apex body with / without valid GATE score. The students with valid GATE score shall be given preference and the students without GATE score shall be considered subject to the vacancy.

RULE NO. 2 : SCHEME OF ASSESSMENT:

A candidate, to be eligible for the Master's Degree in Architecture, will be required to appearfor and pass examinations as under
1. First Year M. Arch: SEM I AND SEM II
2. Second Year M. Arch. : SEM II AND SEM IV

University will declare combined result of
• SEM I + SEM II at the end of First Year and
• SEM III + SEM IV at the end of Second Year

RULE NO. 3 : GRANTING OF TERM

Academic year will consist of TWO SEMESTERS of 90 teaching days each. Sessional work/ assignments prepared by the students shall be continuously assessed by the Internal Teacher throughout the semester.

The candidate will be permitted to appear for the examinations at the end of each semester only if he/she keeps term at a college affiliated to the university and produces testimonials from the Principal for

1. 75% attendance in each head of passing of Theory and /or Sessional work as prescribed by the University.
2. Satisfactory completion of the Sessional Work prescribed for each subject and secured at least 50 % marks in the Internal Assessment for the same.
3. Good conduct.

RULE NO.4 : EXAMINATIONS

At each examinations Theory Paper Sessional and Sessional and viva – voce based on Sessional Work, as prescribed in the syllabus for the Examination at the end of each semester, shall constitute separate heads of passing.

RULE NO. 5 : SESSIONAL WORK ASSESSMENT:

In respect of Sessional work in First, Second, Third and Fourth semesters, target date shall be fixed for the completion of each assignment. All assignments shall be continuously assessed by the Internal Teacher during each semester.
b) For the First, Second, and Third Semester examinations, Sessional and Viva assessment will be done by an External Examiner, who is external to the college i.e. teacher from college other than one, whose students are being examined.
c) For Fourth Semester examination, external assessment shall be carried out by a professional not teaching in any of the Colleges under University of Pune.
d) An examiner for any of the subjects of examination shall have a minimum of 5 years of teaching / professional experience in his/her specific field of study.

RULE NO. 6: PRE REQUISITES AND RULES OF A.T.K.T. FOR ADMISSION TO HIGHER CLASSES

This course has been considered as an integrated on and students will be allowed to take admission to second, third and fourth semesters irrespective of number of subjects in which they are failing.

RULE NO. 7 : CRITERIA FOR PASSING

To pass the First and Second Year Examination, a candidate must obtain minimum 50 % marks in each paper, 50% in Sessional/Viva voce and 50% in aggregate.

RULE NO. 8 : GRADING SYSTEM

Assessment and Grade Point Average

R-8.1 Marks/Grade/Grade Point

A grade is assigned based on the total marks obtained by a student in all the heads of examination of the course. These grades, their equivalent grade points are given in Table 3.

The guidelines for conversion of marks to grades are given below.

Grade	Grade	Percentage of	Remarks
O	10	90-100	Outstanding
A	9	80-89	Very Good
B	8	70-79	Good
C	7	60-69	Fair
D	6	50-59	Average
E	0	Below 50	Fail

R-8.2 Passing Grade

The grades **O, A, B, C**, **D**, are passing grades. A candidate acquiring any one of these grades in a course shall be declared as pass. And student shall earn the credits for a course only if the student gets passing grade in that course.

R-8.3 E Grade

The grade E shall be treated as a failure grade. The student with E grade will have to pass the concerned course by re-appearing for the examination. The student with E grade for any stage of the Project Work will have to carry out additional work/ improvement as suggested by the examiners and re-appear for the examination.

Rule No. 9. PERFORMANCE INDICES:

R-9.1 SGPA

The performance of a student in a semester is indicated by a number called the Semester Grade Point Average (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses, seminars and projects registered by the student during the semester.

(i) Semester Grade Point Average (SGPA) =

$$SGPA = \frac{\sum_{i=1}^{p} Ci\ Gi}{\sum_{i=1}^{p} Ci}$$

$$SGPA = \frac{\sum \text{Grade Points Earned} \times \text{Credits for each course}}{\text{Total Credits}}$$

For Example: suppose in a given semester a student has registered for five courses having creditsC1, C2, C3, C4, C5 and his / her grade points in those courses are G1, G2, G3, G4, G5 respectively. Then students

$$SGPA = \frac{C1G1 + C2G2 + C3G3 + C4G4 + C5G5}{C1 + C2 + C3 + C4 + C5}$$

SGPA is calculated up to two decimal places by rounding off.

R-9.2 CGPA

The CGPA is the weighted average of the grade points obtained in all the courses, seminars and projects registered by the student since student is admitted to the college. It is calculated in the same manner as the SGPA.

R-9.3 ln case of a student clearing a failed course or improvement, the earlier grade would be replaced by the new grade in calculation of the SGPA and CGPA.

Rule No. 10. RESULT:

R-10.1 Based on the performance of the student in the semester examinations, the University of Pune will declare the results and issue the Semester Grade sheets.
The University of Pune will issue a Degree Certificate and the final grade sheet ofSemester I, II, III & IV, to the student, who is otherwise eligible for the award of Degree of Master of Architecture.

R-10.2 The class shall be awarded to a student on the CGPA calculated based on all the four semesters. The award of the class shall be as per Table 4.

Sr. No.	**CGPA**	**Class of the Degree awarded**
1	7.75 or More than 7.75	First Class with Distinction
2	6.75 or more but less than 7.75	First Class
3	6.25 or more but less than 6.75	Higher Second Class
4	5.5 or more but less than 6.25	Second Class

RULE NO. 11 : EXEMPTIONS AND SUPPLEMENTARY EXAMINATION

In case a candidate fails and desires to appear again,
a) He/she will be exempted from appearing in the head/s of passing in which he/she has passed.
b) A candidate will have to appear for the examination of backlog subjects along with the examination of current semester.

RULE NO. 12 : OTHER RULES:

University/ affiliated colleges may frame additional rules and regulations or modify these regulations if required, and once approved by the University, they would be binding on the students.

COURSE STRUCTURE

UNIVERSITY OF PUNE
COURSE STRUCTURE MASTER IN ARCHITECTURE (Architectural Conservation)

Credit Structure for M.Arch Programme					
Course work	Semester I	Semester II	Semester III	Semester IV	Total
Core courses	16	16	16	-	48
Elective Courses	2	2	2	-	6
Lab Courses + Supportive courses	7	7	3	-	17
Seminar	-	-	-	5	5
Project work	-	-	4	20	24
Total	**25**	**25**	**25**	**25**	**100**

[TO BE IMPLEMENTED W.E.F.ACADEMIC YEAR 2015 - 2016]

SEMESTER I M.ARCH (Architectural Conservation)														
Sub. Code	SUBJECT	Course	Hrs /wk	TEACHING SCHEME			EXAMINATION SCHEME							Credits
				period/ wk	lect./Wk	studio /Wk	Paper	Term work	Sessional		Oral		Total	
									Int	Ext	Int	Ext		
AC101	Conservation Studio I	Core	9	12	2	10	-	-	150	150	25	25	350	9
AC102	Planning Theory	Core	4	5	2	3	-	-	75	75	-	-	150	4
AC103	Introduction to conservation	Core	3	3	2	1	100	25		-	-	-	125	3
AC104	Elective -I	Elective	2	2	1	1	-	100	-	-	-	-	100	2
AC105	Structural Conservation- I	Lab/ Sup.	4	5	2	3	-	-	75	75	-	-	150	4
AC106	Material culture studies	Sup*.	3	3	2	1	100	25	-	-	-	-	125	3
TOTAL (SEMESTER I)			25	30	11	19	200	150	300	300	25	25	1000	25

Sup* - supportive

SEMESTER II M.ARCH (Architectural Conservation)														
Sub. Code	SUBJECT	Course	Hrs /wk	TEACHING SCHEME			EXAMINATION SCHEME							Credits
				period/ wk	Lect./ Wk	Studio /Wk	Paper	Term Work	SESSIONAL		Oral		total	
									Int	Ext	Int	Ext		
AC201	Conservation Studio II	Core	9	12	2	10	-	-	150	150	25	25	350	9
AC202	History, Theory and Criticism	Core	4	5	2	3	-	-	75	75	-	-	150	4
AC203	Conservation Management	Core	3	3	2	1	100	25	-	-	-	-	125	3
AC204	Elective- II	Elective	2	2	1	1	-	100	-	-	-	-	100	2
AC205	Structural Conservation II	Lab/ Sup.	4	5	2	3	-	-	75	75	-	-	150	4
AC206	Research -I	Sup.	3	3	1	2	100	25	-	-	-	-	125	3
TOTAL (SEMESTER II)			25	30	10	20	200	150	300	300	25	25	1000	25

SEMESTER III M.ARCH (Architectural Conservation)

Sub. Code	SUBJECT	Course	Hrs /wk	TEACHING SCHEME			EXAMINATION SCHEME							Credits
				period/ wk	lect./Wk	studio /Wk	Paper	Term Work	SESSIONAL		Oral		Total	
									Int	Ext	Int	Ext		
AC301	Conservation Studio III	Core	9	12	2	10	-	-	150	150	25	25	350	9
AC302	Cultural Landscape	Core	4	5	2	3	-	-	75	75	-	-	150	4
AC303	Conservation Legislation	Core	3	3	2	1	100	25		-	-	-	125	3
AC304	Elective III	Elective	2	2	1	1	-	100	-	-	-	-	100	2
AC305	Conservation Practices and Training**	Project Work	4	4	1	3	-	50	-	-	50	50	150	4
AC306	Heritage risk assessment and mitigation	Sup.	3	3	2	1	100	25	-	-	-	-	125	3
TOTAL (SEMESTER III)			25	25	09	16	200	150	275	275	50	50	1000	25

****** This includes Professional Training (40 full working days) to be undertaken during intermediate time between II & III Semester, details of which are mentioned in the detailed syllabus. The Oral Assessment of the same will be held at the end of Semester III

SEMESTER IV (Architectural Conservation)

Sub. Code	SUBJECT	Course	Hrs /wk	TEACHING SCHEME			EXAMINATION SCHEME							Credits
				period/ wk	lect./Wk	studio /Wk	Paper	Term Work	SESSIONAL		Oral		Total	
									Int	Ext	Int	Ext		
AC401	Project	Project Work	20	22	5	17	-	-	300	300	100	100	800	20
AC402	Research II	Seminar	5	8	1	7	-	-	100	100	-	-	200	5
TOTAL (SEMESTER IV)			25	30	06	24	-	-	400	400	100	100	1000	25

COURSE CONTENTS

M.Arch.(Architectural Conservation)

SEM I

CONSERVATION STUDIO - I

Subject Code- AC101			
Teaching Scheme		Examination Scheme	
Hours/Week	09	Paper	-
Lectures/week	02	Term Work	-
Studio/Week	10	Sessional(Internal)	150
Total Contact period /week	12	Sessional(External)	150
		Oral (Internal)	25
		Oral(External	25
Total Credits	12	Total Marks	350

Objective –

Focus of studio is on historic building in a historic area through various surveys, its analysis. Conservation of the building to be demonstrated with desired interventions at building level as well as the vicinity addressing town's requirements at large.

Course Contents

Unit	Contents	No.of lectures
Unit I	Historical research	20
Unit II	Perception of the user society	10
Unit III	Inventory formation and detail documentation	30
Unit IV	Analysis for materials, techniques, spatial arrangement, art and crafts, significant element	20
Unit V	Statement of significance and identification of issues	20
Unit VI	Conservation interventions	20
Unit VII	Adaptive Reuse Proposal	40

Sessional/ Termwork Assessment

Studio work based on field studies to be regularly critically reviewed and the final out put will be in the form of presentation based on drawings along with a report.

PLANNING THEORY			
Subject Code – AC102			
Teaching Scheme		Examination Scheme	
Hours/Week	05	Paper	-
Lectures/week	02	Term Work	-
Studio/Week	03	Sessional(Internal)	75
Total Contact period /week	05	Sessional(External)	75
		Oral (Internal)	-
		Oral(External	-
Total Credits	04	Total Marks	150

Objective –

To introduce students to the various streams of planning that directly or indirectly influence the process of conservation. Historic Housing forms the major part of historic core of towns or villages. The Objective is to understand the typology and transformation processes in the living heritage of housing and highlight the relation of transformation and conservation process.

Course Contents

Unit	Contents	No.of lectures
Unit I	Planning objectives and introduction to planning terminologies, plans development structures,	04
Unit II	Introduction to planning streams like urban planning, regional planning, traffic and transportation, environmental Planning and housing	16
Unit III	planning acts and development controls, byelaws having impact in historic areas	04
Unit IV	Planning for conservation	08
Unit V	Morphology of a traditional habitat, Housing typology, concepts, policies, socio-political aspects of urbanization, urban growth	08
Unit VI	Methodology to study existing housing stock, characteristics, problems	08
Unit VII	Management of housing stock.	04
Unit VIII	Conservation efforts for historic housing	12

Sessional/ Termwork Assessment

Minimum six assignments based on,

Field study – Study of a historic housing

Book study – Conservation efforts in Planning, review of development plans

Project – review of development plans

Recommended Readings

1. Reading Materials By ITPI

2. Urban Planning By Peter Hall

3.Urban Planning Guide – American Society of civil engineers

INTRODUCTION TO CONSERVATION

Subject Code – AC103			
Teaching Scheme		Examination Scheme	
Hours/Week	03	Paper	100
Lectures/week	02	Term Work	25
Studio/Week	01	Sessional(Internal)	-
Total Contact period /week	03	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	03	Total Marks	125

Course Contents

Unit	Content	No.of lectures
Unit I	Conservation as a concept and its Background • History of Conservation Movement. • Western Context vs Eastern Context • Theory and philosophy of conservation • Study of Personalities contributing to conservation	16
Unit II	• Organizations involved in conservation fields- International, national, regional and local • World Heritage & UNESCO- World heritage list & World heritage sites- documentation scenario ICCOROM & ICCOMOS • Emerging concepts – Living Heritage, Cultural Landscape • Conservation approaches	08
Unit III	Introduction to various charters- International & National. • All Charters from Venice to Mexico • Special focus on Indian Context • Human rights and values	08
Unit IV	Heritage Legislations- Indian Context • Contribution of ASI • Contribution of INTACH • Concepts of Heritage cell in mainstream local governance • Roles of heritage custodians	08
Unit V	Conservation Practices • Overview of conservation practices • Various disciplines n expertise involved • Basic Principles of Conservation • Ethics of Conservation • Degrees of Interventions • Concepts of grading heritage • Heritage bylaws • International Awards for Conservation Projects	08
Unit VI	Technical requirements of a conservation project • Conservation scenario and documentation systems- case studies -10 countries	08

	• Need of documentation ,Different Types and levels of documentation with case studies Inventory formulation • Resource Mapping- Formulation of Heritage list Preparation of heritage maps. • INTACH charter & guidelines for completing INTACH inventory for historic buildings • Building Surveys & Measured drawings for supplementing the process of Documentation with case studies Steps of documentation- background research & data collection , field work and sample work , post field work- interpretation, analysis and its presentation • Investigation Methods • Condition Mapping • Condition / Damage Assessment • Conservation Proposals	
Unit VII	Documentation Methods –Modern Trends & Digital Technologies • GIS,GPS • Photo documentation and photogrammetry- traditional and unconventional metrical documentation techniques • The utility of geodetic survey techniques and equipment in architectural heritage documentation. • Digital imaging and cultural heritage • Optical Documentation Techniques for Condition Assessment of Facades • Neuro-linguistic programming and Cultural Heritage Research and Documentation • Advanced technologies for archaeological documentation • Internet and cyber security	04
Unit VIII	Research component in a conservation project	04

Sessional /Termwork Assessment

Minimum six assignments based on,

Field study –site visit of least one ongoing conservation project and an organization involved in conservation works.

Book study – Charters, Philosophy, case study

Project – Critical Appreciation of a conservation Project

Recommended readings

- A Technical Manual by Sir Bernard Fieldon.
- A History of Architectural Conservation by Jukka Jokilehto
- Conservation Manual by Sir John Marshall
- All Charters by UNESCO

ELECTIVE - I			
Subject Code- AC104			
Teaching Scheme		Examination Scheme	
Hours/Week	02	Paper	-
Lectures/week	01	Term Work	100
Studio/Week	01	Sessional(Internal)	-
Total Contact period /week	02	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	02	Total Marks	100

-
- **ELECTIVES (ALLIED)**
- **Objective –** Elective will introduce student to the emerging practices in the allied fields of conservation.
- **Course Contents-**
- Student will select one of the subject as per the availability of the expert faculty
- 1. Building performance
- 2. Advance Documentation methods
- 3. Digital tools
- Note- The Institute shall have the freedom to offer listed or any additional subjects based on the availability of experts.
- **Sessional/ Termwork Assessment**
- A project is to be worked upon and a report is to be submitted.

- Recommended Reading
- As per faculty's suggestion

STRUCTURAL CONSERVATION - I

Subject Code – AC105			
Teaching Scheme		Examination Scheme	
Hours/Week	05	Paper	-
Lectures/week	02	Term Work	-
Studio/Week	03	Sessional(Internal)	75
Total Contact period /week	05	Sessional(External)	75
		Oral (Internal)	-
		Oral(External	-
Total Credits	04	Total Marks	150

Objective –

The objective is to introduce students to the traditional materials and techniques and introduce to structural behavior of traditional structures.

It will teach students about the various material and structural defects and ways of documenting it

Course Contents

Unit	Contents	No.of lectures
Unit I	Study of traditional structures • Elements of structure • Regional variation in structural systems	08
Unit II	Traditional materials – properties, behavior with lab experiments and defects • Stone • Timber • Brick • Lime • Adhesives • Metals and alloys	16
Unit III	Traditional Techniques • Using different materials	08
Unit IV	Structural Behaviour of traditional structures • Foundation, • Walls • Beams and columns • Roofing systems	08
Unit V	Defect mapping techniques • Identifying structural defects and documenting it • Identifying Material defects and documenting it	08
Unit VI	New materials in conservation practices • Epoxy	08

	• Silicon based materials • others	
Unit VII	New conservation techniques and role of softwares in assessing structural conditions	08

Sessional/Termwork Assessment

Minimum six assignments based on,

Field study –Hands on or site visit of least one ongoing conservation project

Book study – case studies

Project – Detail Documentation of a traditional structure

Lab study of a material

Recommended Readings

Elements of structure – Morgan

Structural Systems – Cowan Henry J and Wilson Forrest

Wood Technology in the design of structures – Hoyle Robert

Stone – Nunn E

MATERIAL CULTURE STUDIES

Subject Code – AC106			
Teaching Scheme		Examination Scheme	
Hours/Week	03	Paper	100
Lectures/week	01	Term Work	25
Studio/Week	02	Sessional(Internal)	-
Total Contact period /week	03	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	03	Total Marks	125

Objective –

To introduce students to understand how material culture communicate ideas in history, archaeology and helps better understanding of the culture pertaining to it.

Course Contents

Unit	Contents	No.of lectures
Unit I	Introduction to Material Culture • What is material culture? • Its role in interpreting past	04
Unit II	Studying Material Culture	16
Unit III	Archaeological Approaches	08
Unit IV	Anthropological Approaches	08
Unit V	Social History and Material Culture	08
Unit VI	Technology And Material Culture	08
Unit VII	Built Habitat As A Material Culture	04
Unit VII	Preservation of Material culture	08

Sessional/ Termwork Assessment

Minimum six assignments based on,

Field study – Museum Visit and report

Book study – Article reviews

Project – research on material culture of the settlement taken up in the studio I

Recommended Readings

Tilley, Chris, Handbook of Material Culture (2006)

Dan Hicks, Mary C. Beaudry, The Oxford Handbook of Material Culture Studies (2010)

Henry H. Glassie, Material culture, (1999)

SEM II

CONSERVATION STUDIO - II			
Subject Code – AC201			
Teaching Scheme		Examination Scheme	
Hours/Week	09	Paper	-
Lectures/week	02	Term Work	-
Studio/Week	10	Sessional(Internal)	150
Total Contact period /week	12	Sessional(External)	150
		Oral (Internal)	25
		Oral(External	25
Total Credits	12	Total Marks	350

Objective –

Objective of this subject is to introduce student to identify the urban heritage and complexities involved in devising conservation policy for same.

Course Contents

Unit	Contents	No.of lectures
Unit I	Identification of heritage in historic town	30
Unit II	Identification of issues	10
Unit III	Devising a comprehensive conservation policy	20
Unit IV	Delineating a precinct in the town	20
Unit V	Devising Area conservation strategy	20
Unit VI	Preparing Management plan	20
Unit VII	Designing in context	40

Sessional/ Termwork Assessment –

Studio work based on field studies to be regularly critically reviewed and the final out put will be in the form of presentation based on drawings along with a report.

HISTORY, THEORY AND CRITICISM			
Subject Code –AC202			
Teaching Scheme		Examination Scheme	
Hours/Week	05	Paper	-
Lectures/week	02	Term Work	-
Studio/Week	03	Sessional(Internal)	75
Total Contact period /week	05	Sessional(External)	75
		Oral (Internal)	
		Oral(External	
Total Credits	04	Total Marks	150

Objective –

Objective of this subject is to introduce students to different theories, philosophies that have significant contribution in the development of conservation practices.

It will also make student familiar with regional history and evolution of architectural styles

Course Contents

Unit	Contents	No.of lectures
Unit I	Development of history	08
Unit II	Famous historians and various approaches to history	12
Unit III	Movements in art and architecture	12
Unit IV	Movements in philosophy and literature and its interpretation	08
Unit V	Study of architectural history of the region	16
Unit VI	Identification of vernacular styles	08

Sessional/ Termwork Assessment

Minimum six assignments based on,

Field study – Study of Traditional and vernacular building typology

Study of building crafts

Book study – Review of at least one book as suggested by the faculty

Recommended Reading

1. Books by David Watkin, Pevsner
2. Architecture of the city – Aldo Rossi
3. Seven Lamps of Architecture – John Ruskin

4. Complexities and contradiction in architecture – Robert Ventury

5. Classical Language of Architecture – John Summerson

6. A History of Architectural Theory – From Vitruvius to present day by Hanno-Walter

CONSERVATION MANAGEMENT			
Subject Code – AC203			
Teaching Scheme		Examination Scheme	
Hours/Week	03	Paper	100
Lectures/week	02	Term Work	25
Studio/Week	01	Sessional(Internal)	-
Total Contact period /week	03	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	03	Total Marks	125

Objective – Management of available resources becomes an important aspect of sustainability. This subject deals with systematic and methodical approaches of management of cultural resource at various levels in various disciplines.It is a practice of managing cultural heritage. It is a branch of cultural resources management (CRM), although it also draws on the practices of cultural conservation, restoration, museology, archaeology, history and architecture. It also highlights the various realms of management this disciple is entering into

Course Contents

Unit	Contents	No.of lectures
Unit I	• Concept of Cultural Resources and their identification. • Cultural resources management - Paradigm shift	04
Unit II	• Conservation Management & Management fundamentals • Aspect considered in conservation management- carrying capacities, Quality control and management • Cultural Resource Mapping • Cultural heritage assessment • Management tools – like Digital aided tools, Visitor Management , people's participation etc.	12
Unit III	• Management of Historic building – requirement of regular maintenance, types of special repairs, annual repairs, common problems faced in historic buildings, preparing maintenance programs for historic buildings. • Site level management- planning for site development, interpretation of site, facilities provided for visitors, visitor management, site infrastructure. • Management of conservation projects – types of contract, specification for conservation, maintenance work, and contract administration.	16
Unit IV	• Areas of management- modern paradigms and trends like Heritage visitor attractions, Information Management, Risk preparedness, Disaster management.etc.	04

Unit V	• World heritage and concept of conservation management plan. • World heritage nomination procedure • Operational guidelines for world heritage convention	12
Unit VI	• World heritage site management – Contribution of International organizations • Conservation Management & Heritage tool kits • Heritage economics & cultural heritage	08
Unit VII	• Indian scenario - ASI contribution in world heritage management - Indian example • Conservation & heritage management – JNNURM CDP- case study	04
Unit VIII	Emerging approaches like • ITUC- Integrated Territorial Urban Conservation • Indian scenario – Integrated planning and heritage management	04

Sessional/ Termwork Assessment –

Minimum six assignments based on,

Field study – site visit of least one ongoing conservation project and an organization involved in management of conservation works.

Book study – Management approaches and tools by various countries- book reviews

Project – Formulation OF Managemt Framwork at town level in accordance to conservation studio-II- policies & strategies

Recommended Reading –

- Planning for conservation by Roger Kain,
- Conservation Planning by Alan Dobby ,
- World Heritage site Management by Sir Bernard Fieldon.
- The Fort Precinct in Bombay – A proposal for Area conservation by Rahul Mehrotra
- Management Plans of world heritage sites

ELECTIVE- II			
Subject Code – AC204			
Teaching Scheme		Examination Scheme	
Hours/Week	02	Paper	-
Lectures/week	01	Term Work	100
Studio/Week	01	Sessional(Internal)	-
Total Contact period /week	02	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	02	Total Marks	100

Objective –

The objective is to Introduce students to various aspects of urban studies to enable him to understand the complexities involved in urban issues

Course Contents

Student will select one of the subject as per the availability of the expert faculty

1. Urban Design

2. Urban Regeneration

3. City and theory

Note- The Institute shall have the freedom to offer listed or any additional subjects based on the availability of experts.

Sessional/ Termwork Assessment –

A project is to be worked upon and a report is to be submitted.

STRUCTURAL CONSERVATION II			
Subject Code – AC205			
Teaching Scheme		Examination Scheme	
Hours/Week	05	Paper	-
Lectures/week	02	Term Work	-
Studio/Week	03	Sessional(Internal)	75
Total Contact period /week	05	Sessional(External)	75
		Oral (Internal)	
		Oral(External	
Total Credits	04	Total Marks	150

Objective

To equip students with technical know-how required for successful structural conservation.
It will focus on traditional as well as contemporary methods and techniques used in structural interventions.

Course Contents

Unit	Contents	No.of lectures
Unit I	Principles of interventions	02
Unit II	Identification of problems and Identifying possible measures and choosing appropriate measures	02
Unit III	Structural interventions for different structural elements like arches, dome, vaults, columns, beams	16
Unit IV	Retrofitting and strengthening	08
Unit V	Preventive measures	04
Unit VI	Demonstration	32

Sessional/ Termwork Assessment

Minimum six assignments based on,

Field study – Study of a historic structure for structural assessment

Book study – case studies for interventions

Project – Based on field study a detail project report of a structure studied including condition mapping and desired interventions

Recommended Reading

Repair and Maintenance of stone Practical Building Conservation Vol.1. Stone Masonry by John Nicola Ashrust

Care and preservation of Museum Objects, New Delhi : National Research Laboratory for conservation of cultural property – O.P.Agarwal

RESEARCH - I			
Subject Code – AC206			
Teaching Scheme		Examination Scheme	
Hours/Week	03	Paper	100
Lectures/week	02	Term Work	25
Studio/Week	01	Sessional(Internal)	-
Total Contact period /week	03	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	03	Total Marks	125

Objective –

The objective of this subject is to introduce student to theoretical framework of research, techniques of research writing and research philosophy.

Contents

Unit	Contents	No.of lectures
Unit I	Types of Research: Qualitative and Quantitative research, Historical Research, Descriptive Research, Experimental Research	08
Unit II	Research Methods: Survey, Comparative Research, Co relational Methods	04
Unit III	Research sample and methods of sampling	04
Unit IV	Review of related literature	04
Unit V	Research Design- Research plan and research questions	04
Unit VI	Tools and Techniques of research	12
Unit VII	Writing references, synopsis and research paper	12
Unit VIII	Historical Research	16

Sessional/ Termwork Assessment -

Minimum six assignments based on,

Field study – research on historic town

Book study – Article/ book review writing

Recommended reading –

1. Architectural research methods by Linda Groat, David Wang
2. Research Methodology, Methodology and Techniques by C.R. Kothari
3. As per faculty's suggestion

SEM III

CONSERVATION STUDIO - III			
Subject Code – AC301			
Teaching Scheme		Examination Scheme	
Hours/Week	09	Paper	-
Lectures/week	02	Term Work	-
Studio/Week	10	Sessional(Internal)	150
Total Contact period /week	12	Sessional(External)	150
		Oral (Internal)	25
		Oral(External	25
Total Credits	12	Total Marks	350

Objective –

The objective of this studio is to make students aware of the challenges and issues of heritage conservation at regional level.

Course Contents

Unit	Contents	No.of lectures
Unit I	Understanding the heritage at a regional level	08
Unit II	Delineating the study area based on preliminary research	04
Unit III	Documenting various cultural resources in the region	20
Unit IV	Identifying issues pertaining to heritage at all levels	04
Unit V	Statement of significance	04
Unit VI	Conservation interventions	16
Unit VII	Management Proposal	08

Sessional/ Termwork Assessment

Studio work based on field studies to be regularly critically reviewed and the final out put will be in the form of presentation based on drawings along with a report.

CULTURAL LANDSCAPE			
Subject Code- AC302			
Teaching Scheme		Examination Scheme	
Hours/Week	05	Paper	-
Lectures/week	02	Term Work	-
Studio/Week	03	Sessional(Internal)	75
Total Contact period /week	05	Sessional(External)	75
		Oral (Internal)	-
		Oral(External	-
Total Credits	04	Total Marks	150

Objective –

Management of available resources becomes an important aspect of sustainability. This subject deals with systematic and methodical approaches of management of cultural resource at various levels in various disciplines.It is a practice of managing cultural heritage. It is a branch of cultural resources management (CRM), although it also draws on the practices of cultural conservation, restoration, museology, archaeology, history and architecture. It also highlights the various realms of management this disciple is entering into.

Course Contents

Unit	**Contents**	**No.of lectures**
Unit I	• Concept of Cultural Resources and their identification. • Cultural resources management - Paradigm shift	04
Unit II	• Conservation Management & Management fundamentals • Aspect considered in conservation management- carrying capacities, Quality control and management • Cultural Resource Mapping • Cultural heritage assessment • Management tools – like Digital aided tools, Visitor Management , people's participation etc.	12
Unit III	• Management of Historic building – requirement of regular maintenance, types of special repairs, annual repairs, common problems faced in historic buildings, preparing maintenance programs for historic buildings. • Site level management- planning for site development, interpretation of site, facilities provided for visitors, visitor management, site infrastructure. • Management of conservation projects – types of contract, specification for conservation, maintenance work, and contract administration.	16
Unit IV	• Areas of management- modern paradigms and trends like Heritage visitor attractions, Information Management, Risk preparedness, Disaster management.etc.	04

Unit V	• World heritage and concept of conservation management plan. • World heritage nomination procedure • Operational guidelines for world heritage convention	12
Unit VI	• World heritage site management – Contribution of International organizations • Conservation Management & Heritage tool kits • Heritage economics & cultural heritage	08
Unit VII	• Indian scenario - ASI contribution in world heritage management - Indian example • Conservation & heritage management – JNNURM CDP- case study	04
Unit VIII	Emerging approaches like • ITUC- Integrated Territorial Urban Conservation • Indian scenario – Integrated planning and heritage management	04

Sessional/Termwork Assessment

Minimum six assignments based on,

Field study – site visit of least one ongoing conservation project and an organization involved in management of conservation works.

Book study – Management approaches and tools by various countries- book reviews

Project – Formulation OF Managemt Framwork at town level in accordance to conservation studio

Recommended Readings

- Planning for conservation by Roger Kain,
- Conservation Planning by Alan Dobby ,
- World Heritage site Management by Sir Bernard Fieldon.
- The Fort Precinct in Bombay – A proposal for Area conservation by Rahul Mehrotra
- Management Plans of world heritage sites

CONSERVATION LEGISLATION			
Subject Code- AC303			
Teaching Scheme		Examination Scheme	
Hours/Week	03	Paper	100
Lectures/week	02	Term Work	-
Studio/Week	01	Sessional(Internal)	25
Total Contact period /week	03	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	03	Total Marks	125

Objective

Conservation Legislation reflects the requirements of Architectural Conservation of a monument or a precinct, and hence is based on a specific context of people, place & culture. Conservationists are called upon to formulate conservation guidelines and regulations and hence they should be conversant with the legal terminology and the overall legal framework within which the Conservation legislation has to function. The approach for study should be on the understanding of the legislative practice and the reflection of the purpose of the act in its specific provisions.

Course Contents

Unit	Contents	No.of lectures
Unit I	Origin of Law and its development-Elements of Legislation	16
Unit II	Study of Building legislation-MRTP Act, Land Acquisition Act, Rent Act etc.	16
Unit III	Study of Legislation related to Conservation of Monuments	16
Unit IV	Study of Legislation related to Conservation of precincts	16

Sessional/ Termwork Assessment

Minimum four assignments based on each Unit and

Book study – Case-study of an existing legislation related to Conservation of a Monument or a Precinct.

Project – Group work Project: Formulation of Legislation for Conservation of a Historic Precinct

Reference Material:

1. MRTP Act, Land Acquisition Act & Rent Act.
2. General Development Control Regulations.
3. ICOMOS Charters & INTACH Charter.
4. Ancient Monuments Act, India.
5. Legislation in India & abroad related to Precinct Conservation

ELECTIVE - III			
Subject Code- AC304			
Teaching Scheme		Examination Scheme	
Hours/Week	02	Paper	-
Lectures/week	01	Term Work	100
Studio/Week	01	Sessional(Internal)	-
Total Contact period /week	02	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	02	Total Marks	100

Objective – Elective will introduce student to the emerging practices in the fields of conservation with heritage as a prime concern.

Course Contents-

Student will select one of the subject as per the availability of the expert faculty

a. Heritage Economics
b. Heritage Tourism
c. Landscape Conservation

Note- The Institute shall have the freedom to offer listed or any additional subjects based on the availability of experts.

Sessional/ Termwork Assessment

A project is to be worked upon and a report is to be submitted.

Recommended Reading

As per faculty's suggestion

CONSERVATION PRACTICES AND TRAINING			
Subject Code - AC305			
Teaching Scheme		Examination Scheme	
Hours/Week	04	Paper	-
Lectures/week	02	Term Work	50
Studio/Week	01	Sessional(Internal)	-
Total Contact period /week	03	Sessional(External)	-
		Oral (Internal)	50
		Oral(External	50
Total Credits	03	Total Marks	150

Objective

Conservation Practice involves many technical aspects in addition to expertise in architectural conservation theory. The objective of Professional Practice is to acquaint students with these aspects, including hands on training at a conservation architect's office.

Course Contents

Unit	Contents	No.of lectures
Unit I	Project Report for a Conservation Proposal	12
Unit II	Specifications, Quantity Surveying & Estimate for a Conservation Project	20
Unit III	Architectural Services for a Conservation Project-Scope of work, Fees and professional liability	16
Unit IV	Practical Training for skill development	16

Conservation Training includes Professional Training (40 full working days) to be undertaken during intermediate time between II & III Semester, details of which are mentioned in the detailed syllabus. The Oral Assessment of the same will be held at the end of Semester III.

Sessional/ Termwork Assessment

Minimum six assignments based on

1. Project Report for a Conservation Proposal including Details of work to be undertaken and preliminary estimate for the project
2. Detailed estimate with measurements, schedule of quantities, rate analysis and specification for a part of conservation proposal.
3. Practical training report and drawings preparation.

Recommended Readings

1. PWD specifications

2. Tender documents of heritage works

HERITAGE RISK ASSESSMENT AND MITIGATION			
Subject Code – AC306			
Teaching Scheme		Examination Scheme	
Hours/Week	03	Paper	100
Lectures/week	02	Term Work	25
Studio/Week	01	Sessional(Internal)	-
Total Contact period /week	03	Sessional(External)	-
		Oral (Internal)	-
		Oral(External	-
Total Credits	03	Total Marks	125

Objective

This subject will equip student with required technical knowhow for safeguarding heritage at risk.

Course Contents

Unit	Contents	No.of lectures
Unit I	Types of risks for heritage	16
Unit II	Assessing magnitude of risk	16
Unit III	Heritage impact assessment	16
Unit IV	Mitigation measures	16

Sessional/ Termwork Assessment

Minimum six assignments based on,

Book study –Articles reviews

Project – Formulation OF disaster management plan for heritage site

Recommended Readings

1. Guidance on Heritage Impact Assessments for Cultural World Heritage Properties by ICOMOS
2. Handbook on sesmic retrofit of Buildings by CPWD, Chennai
3. Between two earthquakes – cultural property in sesmic zones by Bernald Fieldon

SEM IV

PROJECT			
Subject Code -AC401			
Teaching Scheme		Examination Scheme	
Hours/Week	25	Paper	-
Lectures/week	5	Term Work	-
Studio/Week	17	Sessional(Internal)	300
Total Contact period /week	22	Sessional(External)	300
		Oral (Internal)	100
		Oral(External)	100
Total Credits	20	Total Marks	800

Objective

The objective of this subject is to enable student to conceptualise and develop a conservation project independently to come up with a policy and/ design level proposal for the same.

Course Content-

Final outcome of the course is in the form of a project. Student will choose a feasible conservation project of his/her interest. A report (Not less than 10000 words) supported with required documentation on the chosen topic is expected as final product.

Sessional/ Termwork Assessment

The student will be assessed periodically and final output will be in the form of proposal report and drawings.

RESEARCH II			
Subject Code – AC402			
Teaching Scheme		Examination Scheme	
Hours/Week	08	Paper	-
Lectures/week	01	Term Work	-
Studio/Week	07	Sessional(Internal)	100
Total Contact period /week	08	Sessional(External)	100
		Oral (Internal)	-
		Oral(External)	-
Total Credits	05	Total Marks	200

Objective

The objective of this subject is to apply the skills of technical writing and conduct a research exploring various aspects of vernacular architecture and built heritage that will support the project studies.

Course Content –

Research/Dissertation based on the topic approved by the Institute in about 5000 words in the format specified by the University.

Sessional/ Termwork Assessment

The student will be assessed periodically and final output will be in the form of proposal report and drawings.